

[0024] The wiring portion is disposed on an outer side of the garment body, and part of the wiring portion exposed on the outer side of the garment body is covered with a waterproof electric insulating member.

[0025] The electric insulating member includes a polyurethane-based film.

[0026] The wiring portion is formed of a conductive resin. The wiring portion is formed with the conductive resin being continuously layered on part of one face of a sheet including a waterproof electric insulating member, and with the face of the waterproof electric insulating member on which the conductive resin is layered being bonded to the garment body.

[0027] The biosignal detecting garment includes at least two conductive connection systems. Each of the conductive connection systems includes: one of the electrodes; the measurement device; and the wiring portion conductively connecting the electrode to the measurement device. At least parts of the conductive connection systems formed on the garment body are separated from each other by a water-repellent and insulating structure.

[0028] The garment body includes a woven or knitted fabric having a stress of equal to or more than 0.5 N and equal to or less than 15 N at an elongation of 60% in a length or breadth direction. The electrodes are closely attached to skin at a pressure of equal to or more than 0.1 kPa and equal to or less than 2.0 kPa when being worn.

[0029] The garment body includes a woven or knitted fabric including elastic yarn and inelastic yarn.

[0030] The elastic yarn includes a polyurethane-based elastic fiber.

[0031] The garment body includes a knitted fabric.

[0032] The measurement device is configured to be attached and connected to and detached from the garment body via a connector.

[0033] The measurement device has a function of transferring data through communication with at least one of a mobile terminal and a personal computer.

[0034] The measurement device has a function of transferring data through wireless communication with at least one of a mobile terminal and a personal computer.

[0035] Moreover, the biosignal detecting garment includes: at least two electrodes each including a conductive fiber structure; a connector through which a measurement device configured to detect and process a bioelectric signal acquired by the electrodes that are in contact with a living body is configured to be attached, connected, and detached; a wiring portion conductively connecting the electrodes to the connector; and a garment body on which the electrodes, the connector, and the wiring portion are placed at predetermined positions.

[0036] The biosignal detecting garment can continuously and stably detect biosignals over a long period of time without giving wearers a feeling of discomfort while being worn by placing electrodes, wiring portions, and a measurement device at predetermined positions on a garment body.

BRIEF DESCRIPTION OF THE DRAWINGS

[0037] FIG. 1 is a schematic diagram of a biosignal detecting garment according to an example.

[0038] FIG. 2 is a cross-sectional view of the biosignal detecting garment illustrated in FIG. 1 along the line A-A'.

[0039] FIG. 3(a) is a schematic diagram of a biosignal detecting garment according to a modification of the example.

[0040] FIG. 3(b) is a cross-sectional view of the biosignal detecting garment illustrated in FIG. 3(a) along the line B-B'.

[0041] FIG. 4 is a schematic block diagram of a measurement device according to the example.

REFERENCE SIGNS LIST

[0042]	1 body
[0043]	2 fifth ribs
[0044]	3 scapula region or costal arch
[0045]	100, 100A biosignal detecting garments
[0046]	101 electrodes
[0047]	102 measurement device
[0048]	103 wiring portions
[0049]	104 garment body
[0050]	105 electric insulating members
[0051]	106 connector
[0052]	110 conductive connection systems
[0053]	120 water-repellent and insulating structures

DETAILED DESCRIPTION

[0054] Our biosignal detecting garment will be described below in detail on the basis of the drawings. The examples do not limit this disclosure.

[0055] FIG. 1 is a schematic diagram of a biosignal detecting garment. As illustrated in FIG. 1, a biosignal detecting garment 100 includes three electrodes 101a, 101b, and 101c each including a conductive fiber structure, a measurement device 102 configured to detect and process bioelectric signals acquired by the electrodes 101a, 101b, and 101c, wiring portions 103a, 103b, and 103c conductively connecting the respective electrodes 101a, 101b, and 101c to the measurement device 102, and a garment body 104 on which the electrodes 101a, 101b, and 101c, the measurement device 102, and the wiring portions 103a, 103b, and 103c are placed at predetermined positions. An example in which the measurement device 102 is an electrocardiogram measurement device will be described below.

[0056] In the biosignal detecting garment 100, the electrodes 101a and 101b are respectively placed on portions configured to have contact with about right and left sides of the chest or the flank when the garment is worn on the inner face (the face configured to have contact with a body 1) of the garment body 104, and the electrode 101c is placed at a position below the electrode 101b, the position being separated from the electrodes 101a and 101b placed at about the right and left sides of the chest or the flank of the garment body 104.

[0057] Since the three electrodes 101a, 101b, and 101c are placed at about the right and left sides of the chest or the flank of the garment body 104 and a site separated from about the right and left sides of the chest or the flank, the electrodes 101a, 101b, and 101c can have a stable contact with the body 1 and enables long-term continuous measurement of biosignals. The measurement device 102 conductively connects to the electrodes 101a, 101b, and 101c by the wiring portions 103a, 103b, and 103c directly placed on the garment body 104. The wiring portions 103a, 103b, and 103c are integrated with the garment body 104, and thus signal degradation due to movements of the wiring portions